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     FILE 'CAPLUS' ENTERED AT 11:02:44 ON 14 MAR 2003
L1          8533 SEA ABB=ON  PLU=ON  (DRUG OR ACTIVE OR PHARMACEUTICAL) (P)
                 (CARRIERS OR DELIVERY) (P)(COMPLEX OR TRANSPORT OR PENETRATION
                 OR PENETRANTS OR ABSORPTION)
L2            33 SEA ABB=ON  PLU=ON  (DRUG OR ACTIVE OR PHARMACEUTICAL) (P)
                 (CARRIERS OR DELIVERY) (P)(REVERSIBLE OR INTERMEDIATE) (5A)
                 (COMPLEX OR COMPLEXATION OR CONJUGAT? OR TRANSFORM?)
                 D L2 IBIB KWIC 1-
L3            56 SEA ABB=ON  PLU=ON  (DRUG OR ACTIVE AGENT OR PHARMACEUTICAL)
                 (P) (CONJUGATE OR CARRIER OR DELIVERY) (P)(REVERSIBLE OR
                 INTERMEDIATE) (5A) (COMPLEX OR COMPLEXATION OR CONJUGAT? OR
                 TRANSFORM?)
L4             0 SEA ABB=ON  PLU=ON  L3 AND (SUBCUTANEOUS OR SUBLINGUAL OR
                 INTRANASAL)
L5             1 SEA ABB=ON  PLU=ON  L3 AND (SUBCUTANEOUS OR SUBLINGUAL OR
                 INTRANASAL OR NASAL)
                 D L5 IBIB KWIC
L6             2 SEA ABB=ON  PLU=ON  L3 AND (CARRIER OR COMPLEX? AGENT OR
                 CONJUGATE OR CONJUGATING AGENT) (P) (CARBOXYLIC ACID OR AMINO
                 ACID OR POLYAMINOACID)
                 D L6 IBIB KWIC 1-
L7             3 SEA ABB=ON  PLU=ON  L3 AND  (CARBOXYLIC ACID OR AMINO ACID OR
                 POLYAMINOACID)
                 D L7 IBIB KWIC 1-
L8          5479 SEA ABB=ON  PLU=ON  (DRUG OR PHARMACEUTICAL) (P) (CARRIER OR
                 TRANSPORT? OR CONJUGAT? OR COMPLEX?) (P) (PEPTIDE OR PROTEINOID
                  OR AMINO ACID OR POLYAMINO ACID)
L9            15 SEA ABB=ON  PLU=ON  L8 (P) (REVERSIBLE OR INTERMEDIATE) (5A)
                 (COMPLEX? OR CONJUGAT?)
                 D L9 IBIB KWIC 1-
L10           81 SEA ABB=ON  PLU=ON  MILSTEIN-IN
L11            0 SEA ABB=ON  PLU=ON  MILSTEIN/IN
L12            0 SEA ABB=ON  PLU=ON  MILSTEIN-SAM/IN
L13            0 SEA ABB=ON  PLU=ON  MILSTEIN-J/IN
                 D L10 1-5
                 E MILSTEIN
                 E MISTEIN-J
                 E MILSTEIN-J
L14           81 SEA ABB=ON  PLU=ON  MILSTEIN/BI
L15            0 SEA ABB=ON  PLU=ON  L14 AND (ACTIVE AGENT)
                 E MILSTEIN/IN
                 E LEONE-BAY/IN
                 E LEIPOLD/IN
L16            0 SEA ABB=ON  PLU=ON  ACTIVE AGENT TRANSPORT SYSYTEM
L17            6 SEA ABB=ON  PLU=ON  ACTIVE AGENT TRANSPORT
                 D L17 IBIB 1-
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=> d ibib full
'FULL' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers;
              SCAN must be entered on the same line as the DISPLAY,
              e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, IPC, and NCL

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT)
              containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and
              its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and
              its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
              structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field
codes.  For a list of the display field codes, enter HELP DFIELDS at
an arrow prompt (=>).  Examples of formats include: TI; TI,AU; BIB,ST;
TI,IND; TI,SO.  You may specify the format fields in any order and the
information will be displayed in the same order as the format
specification.
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L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS
AN 1987:583493 CAPLUS
DN 107:183493
TI Application of synthetic liposomes based on **acyl** amino acids or **acyl peptides** as **drug carriers**. I. Their preparation and transport of glutathione into the liver
AU Kiwada, Hiroshi; Akimoto, Masami; Araki, Michiyo; Tsuji, Mitsuko; Kato, Yuriko
CS Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, 162, Japan
SO Chem. Pharm. Bull. (1987), 35(7), 2935-42
CODEN: CPBTAL; ISSN: 0009-2363
DT Journal
LA English
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1, 34
AB Palmitoyl amino acids and palmitoyl glutathione were synthesized. Liposome-like vesicles based on these compds. were prepd. and their barrier functions were examd. These vesicles showed encapsulation efficiencies for aq. solute comparable to that of conventional phosphatidylcholine liposomes (PC-liposomes). They were also stable in fresh rat plasma at 37.degree.. The biol. behavior (blood clearance, urinary excretion and tissue distribution) of the vesicles based on palmitoyl serine (PSer-liposomes) or palmitoyl glutathione (PGSH-liposomes) was examd. after i.v. injection in rats. The synthetic liposomes were cleared very rapidly from the blood compared with PC-liposomes. PSer-liposomes showed a large amt. of urinary excretion of aq. marker ([3H]inulin), suggesting that the mechanisms of vesicle degrdn. in vivo and in vitro are different. These synthetic liposomes showed low affinity to the spleen and high affinity to the liver in the tissue distribution study, and thus they may be expected to be a useful drug carrier which is targetable to the liver. A suppressing effect of PGSH-liposomes on the increase of plasma glutamate oxaloacetate transaminase (GOT) induced by a high dose of acetaminophen in mice was obsd., and transport of glutathione into the liver cells apparently occurred. The suppressing effect was greater than that of free glutathione or PC-liposomes contg. free glutathione. However, the effect was not obsd. in the case of PGSH-liposomes without phosphatidylcholine, which appears to have an important role in the liposome-cell interaction.
ST acyl amino acid peptide liposome; glutathione delivery liver liposome
IT Liver, metabolism
(palmitoyl amino acid or palmitoyl glutathione liposomes uptake by, glutathione delivery in relation to)
IT Phosphatidylcholines, biological studies
RL: BIOL (Biological study)
(palmitoyl glutathione liposomes contg., glutathione delivery to liver by)
IT Amino acids, reactions
RL: RCT (Reactant)
(reaction of, with palmitic acid hydroxysuccinimide ester)
IT Pharmaceutical dosage forms
(liposomes, palmitoyl amino acids- or palmitoyl glutathione-contg., for glutathione delivery to liver)
IT 70-18-8, biological studies
RL: BIOL (Biological study)
(delivery of, to liver, liposomes contg. palmitoyl amino acids or palmitoyl glutathione for)
IT 2441-41-0, N-Palmitoyl glycine 16417-38-2 17627-10-0 20257-67-4 38079-66-2 110995-58-9
RL: BIOL (Biological study)
(liposomes contg., prepn. and glutathione delivery to liver by)
IT 9000-97-9
RL: BIOL (Biological study)
(palmitoyl glutathione liposomes effect on)
IT 14464-31-4P, N-Hydroxysuccinimide palmitate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with amino acids or glutathione)

IT 27025-41-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, with palmitic acid ester)
IT 110995-59-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and redn. of)